

Fight the Bite: Stop Tick and Mosquito-Borne Diseases

DOVER – One of the best things about summer weather is more time outside. The Division of Public Health (DPH) urges people to get active and enjoy the outdoors in support of a healthy lifestyle. The Division also reminds Delawareans to protect themselves from tick and mosquito bites before heading outside. Tick and mosquito bites can cause serious illnesses, and a few small steps, such as using insect repellent, can make a big difference.

In Delaware, the most common tick-borne disease is Lyme disease, which is transmitted to humans by the bite of infected deer ticks. Preliminary data for 2016 indicates there were 506 Lyme disease cases in Delaware.

Symptoms of Lyme disease can include a “bull’s-eye” rash (seen in approximately half of Lyme disease cases in Delaware), fever, fatigue, headache, and muscle and joint aches. Chronic joint, heart, and neurological problems may occur. It usually takes 24-36 hours of attachment before a tick transmits a disease. Anyone bitten by a tick should monitor their health closely, and contact a physician if symptoms develop.

While the attention in the last year has been on the connection between mosquitoes and Zika virus, mosquitoes can also carry West Nile virus (WNV), Eastern equine encephalitis (EEE), and several other diseases that cause brain inflammation (encephalitis) and can be fatal to humans and animals. Infected mosquitoes transmit these diseases through their bites.

Approximately 80 percent of human WNV infections are mild and cause no apparent symptoms. The other 20 percent develop a mild illness (West Nile fever), which includes fever, body and

muscle aches, headache, nausea, vomiting, and a rash. A small percentage of patients, usually the elderly, develop severe neurological disease that results in meningitis or encephalitis.

DPH recommends these precautions to protect yourself from ticks and mosquitoes

TICK PREVENTION

- Avoid walking in wooded and brushy areas with high grass and leaf litter, as this is where ticks are most commonly found.
- Walk in the center of hiking trails, not on the side.
- Wear light-colored clothing to allow you to see ticks easily.
- Wear long sleeves and long pants, and tuck pant legs into socks.
- Apply tick repellents. Repellents containing permethrin can be sprayed on boots and clothing and will last for several days. Repellents containing DEET can be applied to the skin but will last only a few hours before reapplication is necessary. Use insect repellent containing less than 50 percent DEET for adults. Use repellent containing less than 30 percent DEET on children. The American Academy of Pediatrics (AAP) recommends that repellents with DEET should not be used on infants less than two months old.
- After being outdoors, check for ticks on yourself and your children (especially the head area), and pets, which should be treated with tick and flea preventive products. Ticks can ride home on pets, then attach to a person later.

TICK REMOVAL

- Avoid removing ticks with bare hands to prevent the tick's fluids from getting on your skin. Use fine-tipped

tweezers, shielding fingers with a tissue, paper towel, or rubber gloves.

- Grasp the tick close to the skin surface and pull upward steadily and evenly.
- Dispose of the tick by flushing it. Cleanse the site of the tick bite with an antiseptic or soap and water, and wash your hands.

MOSQUITO PREVENTION

- When outside, wear shoes, long-sleeved shirts, and pants.
- Use mosquito netting to protect infants and young children in carriages, strollers, and playpens. Netting can protect one's face and neck during long hikes. Mosquitoes are most active at dusk and during the early morning hours. However, mosquitoes that spread Zika virus are also active daytime biters.
- Use Environmental Protection Agency (EPA)-registered insect repellents:
 - Follow the manufacturer's instructions for reapplication times.
 - Use insect repellent containing less than 50 percent DEET for adults.
 - Use repellent containing less than 30 percent DEET on children. The American Academy of Pediatrics (AAP) recommends using insect repellents containing 10 percent DEET.
 - Do not apply insect repellent onto a child's hands, eyes, mouth, or on cut or irritated skin. Adults: spray insect repellent onto your hands and then apply to the child's face.
 - AAP also recommends that repellents with DEET should not be used on infants less than two months old.
- Prevent mosquitoes from entering the house by using screens and keeping windows and doorways tightly sealed.

Mosquitoes prefer shallow water and tall vegetation. Eliminate standing water in your yard by changing birdbath water every four days, regularly draining pet dishes and plant pot saucers, and checking gutters, pool covers, and tarps for standing water. Store buckets, wheelbarrows, and wading pools upside down. Keep grass mowed.

For more information, visit [cdc.gov](https://www.cdc.gov) and dhss.delaware.gov/dhss/dph/epi/lyme.html.

A person who is deaf, hard-of-hearing, deaf-blind or speech-disabled can call the DPH phone number above by using TTY services. Dial 7-1-1 or 800-232-5460 to type your conversation to a relay operator, who reads your conversation to a hearing person at DPH. The relay operator types the hearing person's spoken words back to the TTY user. To learn more about TTY availability in Delaware, visit <http://delawarerelay.com>.

Delaware Health and Social Services is committed to improving the quality of the lives of Delaware's citizens by promoting health and well-being, fostering self-sufficiency, and protecting vulnerable populations. DPH, a division of DHSS, urges Delawareans to make healthier choices with the 5-2-1 Almost None campaign: eat 5 or more fruits and vegetables each day, have no more than 2 hours of recreational screen time each day (includes TV, computer, gaming), get 1 or more hours of physical activity each day, and drink almost no sugary beverages.